	Current XRef	Title
1	174/260; 228/180.21; 228/180.22; 361/777; 361/779	Assembly aid for mounting packaged integrated circuit devices to printed circuit boards
2	228/49.5; 228/6.2	Fine pitch electronic component placement method and apparatus
3	29/760; 361/761	Electronic parts mounting apparatus
4	228/44.7	Method and apparatus for mounting a flexible film semiconductor chip carrier on a circuitized substrate
5	118/504; 156/556; 228/6.2; 29/740	Component location device and method for surface-mount printed circuit boards
6	156/299; 156/304.1; 156/556; 269/21	Keyway alignment substrates
7	228/185; 228/56.3; 439/70; 439/876; 439/91	Chip carrier mounting device
8	156/556; 156/557; 156/572; 228/6.2; 29/759; 29/773; 29/786	Assembling components having mating faces
9	269/157; 269/243; 269/287; 269/903; 29/741; 29/845	Method and apparatus for mounting multilead components on a circuit board

	Document ID	Issue Date	Pages	Current OR
10	US 4512509 A	19850423	6	228/180.21
11	US 4479298 A	19841030	10	29/834
12	US 3516155 A	19700623	7	29/839

	Document ID	Issue Date	Pages	Current OR
1	US 5796590 A	19980818	17	361/774
2	US 5526974 A	19960618	7	228/103
3	US 5205032 A	19930427	29	29/740
4	US 5201451 A	19930413	14	228/5.5
5	US 4985107 A	19910115	13	156/299
6	US 4975143 A	19901204	17	438/107
7	US 4705205 A	19871110	20	228/180.22
8	US 4531277 A	19850730	19	29/466
9	US 4528747 A	19850716	13	29/834

	Title	Retrieval Classif
1	Method of locating conductive spheres utilizing screen and hopper of solder balls	438/612
2	Method of locating conductive spheres utilizing screen and hopper of solder balls	438/612
3	Fine pitch solder sphere placement	438/612
4	Method of making components with solder balls	438/612

	Current OR	Current XRef
1	438/613	438/612
2	438/612	228/245; 228/41; 239/135; 438/15; 438/613; 438/614; 438/615; 438/616
3	438/612	228/180.22; 438/118; 438/119
4	438/612	257/737; 257/738; 438/613; 438/614; 438/615; 438/616

	Current XRef	Title
10	228/234.2; 228/49.1	Technique for bonding a chip carrier to a metallized substrate
11	228/179.1; 228/4.1; 228/6.2; 257/678; 257/797; 29/759; 29/827	Alignment apparatus and method for mounting LSI and VLSI packages to a printed circuit board
12	156/60; 228/180.21; 228/213; 228/254; 228/44.7; 228/56.3; 361/760; 361/779; 438/118; 438/125	TEXT NOT AVAILABLE

	Current OR	Current XRef
1	228/180.21	228/246
2	156/297	156/230; 156/285; 156/290; 156/73.6; 228/245; 228/246; 228/56.3
3	219/121.63	219/121.64; 219/85.12
4	228/180.22	228/215; 228/254
5	228/180.21	174/263; 361/774
6	228/245	228/41; 269/21; 269/903
7	228/180.21	228/207; 228/223; 228/245
8	228/180.1	228/246

	Title
1	Method for solder application and reflow
2	Component and solder preform placement device and method of placement
3	Method and apparatus for solder laser printing
4	Method of making high density solder bumps and a substrate socket for high density solder bumps
5	Pad grid array for receiving a solder bumped chip carrier
6	Method and apparatus for aligning solder balls
7	Method of forming solder terminals for a pinless ceramic module
8	Method of bonding connecting pins to the eyelets of conductors formed on a ceramic substrate

L Number	Hits	Search Text	DB	Time stamp
1	2	5431332.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/03/28 11:21
2	8	("4462534" | "4830264" | "4871110" | "4940181" | "5024372" | "5159171" | "5205896" | "5255839").PN.	USPAT	2003/03/28 11:19
3	5	("3871015" | "4332341" | "4412642" | "4462534" | "4708281").PN.	USPAT	2003/03/28 11:21
4	2	"solder sphere" and hopper and stencil and dropping	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/03/28 11:25
5	0	20010041437.URPN.	USPAT	2003/03/28 11:23
6	4	"solder sphere" and hopper and (438/612, 228/245 , 228/41 , 239/135 , 438/15 , 438/613, 438/614 , 438/615 , 438/616).ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/03/28 11:32
7	2	("4256532" | "5880017").PN.	USPAT	2003/03/28 11:26
8	7	("3719981" | "4558812" | "5284287" | "5431332" | "5655704" | "5658827" | "5895554").PN.	USPAT	2003/03/28 11:27
9	12	("3516155" | "4479298" | "4512509" | "4528747" | "4531277" | "4705205" | "4975143" | "4985107" | "5201451" | "5205032" | "5526974" | "5796590").PN.	USPAT	2003/03/28 11:29
10	12	("3569607" | "4412642" | "4655164" | "4914814" | "5024372" | "5039628" | "5211328" | "5268068" | "5372295" | "5480835" | "5536677" | "5539153").PN.	USPAT	2003/03/28 11:30
11	2	5655704.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/03/28 11:32
12	2	("5324569" | "5431332").PN.	USPAT	2003/03/28 11:33

C:\APPS\EAST\Bin\panel.wsp

L Number	Hits	Search Text	DB	Time stamp
1	2	5431332.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/03/28 11:21
2	8	("4462534" | "4830264" | "4871110" | "4940181" | "5024372" | "5159171" | "5205896" | "5255839").PN.	USPAT	2003/03/28 11:19
3	5	("3871015" | "4332341" | "4412642" | "4462534" | "4708281").PN.	USPAT	2003/03/28 11:21
4	2	"solder sphere" and hopper and stencil and dropping	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/03/28 11:25
5	0	20010041437.URPN.	USPAT	2003/03/28 11:23
6	4	"solder sphere" and hopper and (438/612, 228/245 , 228/41 , 239/135 , 438/15 , 438/613, 438/614 , 438/615 , 438/616).ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/03/28 11:32
7	2	("4256532" | "5880017").PN.	USPAT	2003/03/28 11:26
8	7	("3719981" | "4558812" | "5284287" | "5431332" | "5655704" | "5658827" | "5895554").PN.	USPAT	2003/03/28 11:27
9	12	("3516155" | "4479298" | "4512509" | "4528747" | "4531277" | "4705205" | "4975143" | "4985107" | "5201451" | "5205032" | "5526974" | "5796590").PN.	USPAT	2003/03/28 11:29
10	12	("3569607" | "4412642" | "4655164" | "4914814" | "5024372" | "5039628" | "5211328" | "5268068" | "5372295" | "5480835" | "5536677" | "5539153").PN.	USPAT	2003/03/28 11:30
11	2	5655704.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/03/28 11:32
12	2	("5324569" | "5431332").PN.	USPAT	2003/03/28 11:33

C:\APPS\EAST\Bin\panel.wsp